

CLAIMS

1. Household apparatus (1) comprising two panels (2, 3) pivotably connected to one another by a hinge (4) which comprises at least one recess (6) formed in a first panel (2), and at least one hinge element (8), rigidly connected to the second panel (3), rotatably mounted in the recess (6), characterised in that the hinge element (8) is capable of moving between a retracted position in which it cannot penetrate the recess (6) so as to enable the two panels (2, 3) to be separated, and a pivoting position in which it is suitable for penetrating the recess (6) and performing the pivot when the two panels (2, 3) are properly arranged with respect to one another, and in that a control element (9), including a gripping member (30) enabling it to be manually moved between a releasing position and a locking position, is suitable for cooperating with the hinge element (8) so that the latter is in its retracted and pivoting positions when the control element (9) is in its releasing and locking positions, respectively.
2. Household apparatus (1) according to claim 1, characterised in that the control element (9) is separable from the household apparatus (1), wherein the separation of the control element (9) from the household apparatus (1) corresponds to a releasing position.
3. Household apparatus (1) according to claim 1 or 2, characterised in that a spring (10) urges the hinge element (8) toward its retracted position.
4. Household apparatus (1) according to one of claims 1 to 3, characterised in that the control element (9) is slidably mounted on the second panel (3).
5. Household apparatus (1) according to one of claims 1 to 4, characterised in that the hinge element (8) is borne by a rod (7) slidably mounted on the second panel (3) in the direction of the axis (5) of the hinge (4).
6. Household apparatus (1) according to claim 5, characterised in that the control element (9) includes a control surface (19) designed so as to drive a drive element (20) borne by the rod (7) during the movement of the control element (9).
7. Household apparatus (1) according to one of claims 1 to 6, characterised in that a connection element (22), mounted so as to move on a panel (3) between an inactive position and a connection position, is suitable for cooperating with the hinge

(4) so as to establish a connection with a complementary element rigidly connected to this panel (3) only when it is in its connection position.

8. Household apparatus (1) according to claim 7, characterised in that the connection element (22) cooperates with the hinge element (8) and is designed so as to be capable of moving from its inactive position either to its connection position, if the hinge element (8) is located in the recess (6), or to a blocking position located between its inactive and connection positions, if the hinge element (8) is located outside the recess (6) .

9. Household apparatus (1) according to claim 8, characterised in that the hinge element (8) is capable of moving from its retracted position either to a contact position in which it is engaged in the recess (6), if the two panels (2, 3) are pivotably connected to one another, or to a deployed position in which it projects beyond its contact position, if the two panels (2, 3) are separated from one another.

10. Household apparatus (1) according to claim 9, characterised in that the connection element (22) is capable of moving between its inactive position and a selection position located between its inactive and blocking positions, and drives the hinge element (8) from its pivoting position to its contact position when it moves from its inactive position to its selection position.

11. Household apparatus (1) according to claim 10, characterised in that the connection element (22) includes a selection member (23) that is capable of moving between a drive position and an activated position, and that is suitable for cooperating with the hinge element (8) so that, when the hinge element (8) is in its contact position outside the recess (6), the selection member (23) is in its drive position and drives the hinge element (8) past its contact position when the connection element (22) moves from its selection position to its blocked position, and, when the hinge element (8) is in its contact position in the recess (6), the hinge element (8) drives the selection member (23) from its drive position to its activated position when the connection element (22) moves from its selection position to its connection position.

12. Household apparatus (1) according to claims 3 and 11, characterized in that a spring (24) of which the force is greater than that of the spring (10) urging the hinge element (8) urges the selection member (23) toward its drive position.

13. Household apparatus (1) according to claim 5 and either one of claims 11 and 12, characterised in that the selection member (23) includes a selection surface (25) that is designed so as to drive a bearing element (26) borne by the rod (7), and in that the connection element (22) includes a stop surface (27) that extends the selection surface (25) when the selection member (23) is in the drive position, and that is designed so as to come into contact with the bearing element (26) when the connection element (22) is in the blocked position, and a connection surface (28) that extends the selection surface (25) when the selection member (23) is in the activated position, that extends past the stop surface (27) and that is designed so as to hold the hinge element (8) in the recess (6), wherein the bearing element (26) is designed so as to be capable of bypassing the stop surface (27) when it slides along the connection surface (28).
14. Household apparatus (1) according to claim 13, characterised in that the connection element (22) includes a drive surface (29) that is extended by the selection surface (25) and that cooperates with the bearing element (26) so as to drive the rod (7) into its contact position when the connection element (22) moves from its inactive position to its selection position.
15. Household apparatus (1) according to one of claims 7 to 14, characterised in that the connection element (22) is formed by the control element (9).
16. Household apparatus (1) according to claims 6, 14 and 15, characterised in that the drive surface (29) extends the control surface (19), and in that the bearing element (26) is formed by the drive element (20).
17. Household apparatus (1) according to one of claims 1 to 16, characterised in that one of the panels (2, 3) includes a manual control member (31) that is capable of moving between a rest position and an ejection position and that is suitable for cooperating with the control element (9) so as to drive the latter in the direction of its releasing position when it is driven into its ejection position.
18. Household apparatus (1) according to claim 17, characterised in that the manual control member (31) is a button (31) that is slidably mounted in the panel and that includes an inclined surface (33) suitable for sliding against a complementary inclined surface (34) of the control element (9) so as to move the latter.

19. Household apparatus (1) according to claim 17, characterised in that the manual control member (31) is a lever (31) that is mounted in the panel so as to pivot about a pivot pin (35) and that includes a cam surface (36) that is suitable for coming into contact with the control element (9) and moving it when the lever (31) pivots.